

Testimony of William L. Smith
Before the House Energy and Commerce Committee
September 7, 2005

I. Introduction

My name is Bill Smith, and I am the Chief Technology Officer for BellSouth. BellSouth is a full-service communications company providing service to customers in the nine southeastern states of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. I have worked for BellSouth for 26 years, and in my current position I am responsible for overseeing the planning of our overall network, integrating new technology into our network, and ensuring the interoperability between our networks and those of other carriers.

The purpose of my testimony is to address the impact of hurricane Katrina on BellSouth's people and our network. I will describe for you the damage that Katrina has caused, which is unlike any hurricane BellSouth has experienced, and to give you the current status of our restoration efforts. What I will give you today is a snapshot – the situation changes literally every few minutes, as power is restored, flood waters recede, field surveys occur, and repairs are made. Furthermore, because we are still assessing the full impact of the storm on our network and our customers, our damage estimates are preliminary. It will take some time for us to know with certainty the total magnitude of the destruction caused by hurricane Katrina.

Given where our network is located, BellSouth has dealt with hurricanes for years. However, with most hurricanes, from Camille to Andrew, we rarely lost operational status for an entire central office. A central office is a building that houses

the switching and transmission equipment for a geographic area; it is usually the first “building” that all of the wires coming from houses and offices go in connecting to BellSouth’s regional network.

But Katrina was different. Based on what we know today, we lost service in 24 of BellSouth’s central offices in the impacted area. Some of these offices were located in coastal Mississippi and were destroyed by the storm surge when Katrina came ashore. The vast majority of BellSouth’s central offices that are currently out of service are located in greater New Orleans. These central offices failed due to flooding and logistical problems presented by security on the street. The flooding and security issues that BellSouth has had to confront is what makes Katrina different from other hurricanes – both in terms of impact to the network and on our ability to restore service.

Operations in Florida, Alabama, Mississippi and Louisiana, all have been impacted by hurricane Katrina. As I will describe in more detail below, we have 3 different types of restoration efforts underway. In places like Gulfport and Biloxi, Mississippi and New Orleans, the impact on our customers, our employees and our network have been catastrophic and basic restoration is still encumbered by flooding, debris and security issues. In other parts of Louisiana, coastal Mississippi and Alabama, we are well into our restoration efforts and progressing well. In Florida, we are wrapping up our restoration efforts, and freeing up resources like generators, and of course technicians, to move to the other areas where they are needed.

As is standard operating procedure for us during hurricane season, on August 23, BellSouth's network operations team began tracking Tropical Depression 12, then located over the southeastern Bahamas with 35mph winds, moving northwest at 10 mph. This is business as usual for us, but none could have imagined what was to follow. There are two integral pieces to this story: the network, and the people. I plan to first walk you through the people side of this story, because without our people, we would have no company and no network. It is our employees who make BellSouth what it is.

II. Katrina's Impact on People

BellSouth has about 13,000 employees in the states of Alabama, Mississippi, and Louisiana, approximately 6500 of whom were in the hardest hit areas affected by the storm. As of now, we have located or made contact with all but about 110 of those employees, and we are making every effort to locate these employees. Prior to Katrina, BellSouth already had in place an 800 number for BellSouth employees to call to report their status in the event of an emergency and a separate number employees could call to get emergency information. Immediately prior to Katrina, we also took steps to ensure adequate supplies and services were on hand, sending non-perishable food to strategic areas where employees could be stationed, setting up structural materials including tents, showers, toilets, tables, and chairs, and engaging janitorial and guard services. Our experience with prior hurricanes has taught us that our employees will be called upon to work round the clock, and they can best perform the extraordinary tasks expected of them if their basic needs for food, shelter and the safety of their family are addressed.

As Katrina hit the Gulf Coast on August 29th, we assessed potential locations for what we call BellSouth tent cities – stations where employees in affected areas could seek shelter, receive food, ice, water, showers, laundry services, air mattresses, linens and clothing, medical care and financial loans. In addition, we had on hand access to our employee assistance program to provide counseling services as needed. The first tent city was set up in Gulfport, Mississippi on August 30th, a second opened in Baton Rouge on September 1st, and a third on September 2nd in Covington, Louisiana. With the addition of tent cities in Hattiesburg and Jackson, Mississippi, and Kenner, Louisiana by the end of this week, BellSouth will be operating six tent cities that will serve over eight thousand meals daily, and provide assistance for our employees and their families, including medical care.

III. Katrina's Impact on BellSouth's Network – Restoration Efforts¹

BellSouth has 1591 central office buildings across its region. 578 of these central office buildings are located in Alabama, Louisiana and Mississippi. As we do with every storm, our network operations team was tracking Katrina as early as August 23, and began making preparations for potential landfall in the Florida Gulf Coast area. Because our network equipment requires power to operate, our standard hurricane procedures include ensuring that generators are in working order and fuel tanks filled for our central offices and our key administration offices, closing shutters and sealing windows, sandbagging critical facilities, and making arrangements for additional generators where needed.

¹ Because restoration efforts in Florida are mostly complete, the network impacts in section III will focus on operations in Alabama, Mississippi, and Louisiana.

Despite these precautions, Katrina brought considerable damage to BellSouth's network. Katrina first made landfall in South Florida as a Category 1 hurricane on Thursday evening, August 25, and caused considerable damage to the area. Katrina, a Category 5 hurricane that dropped to a Category 4 just before landfall, made landfall in our operating area for the second time at approximately 2 p.m. on Monday, August 29, just east of New Orleans. In some areas, winds exceeded 145 miles per hour and the storm surge was reported as high as 25 feet. In assessing the impact on our network, we have categorized damage to geographic areas caused by Katrina as "catastrophic", "severe" or "moderate". The "catastrophic" areas are red on the map attached as Appendix 1; severe areas are yellow; and moderate areas are green. Much progress has already been made restoring service in the "moderate" areas of the region.

In the Gulf region of Mississippi, Alabama, and Louisiana, we had 4.9 million access lines prior to the storm. Of those 4.9 million lines, 1.6 million were in the red zone, 782,000 were yellow and 2.6 million were green. A snapshot on August 30 after the storm estimated that 2.475 million lines were actually affected. All 1.6 million lines in red zones were affected; 500,000 of the 782,000 lines in yellow zones were affected; and 440,000 of the 2.6 million lines in green zones were affected. Details on a state by state basis are attached as Appendix 2.

The unique problem that BellSouth has experienced with Katrina is that the severe flooding, particularly in New Orleans, has made it difficult to get a clear assessment of the extent of the damage. Normal hurricanes have an initial surge, the water recedes, power begins restoration, and we follow power with sweeping telecom restoration resources. When the levees broke in New Orleans, the water did not recede. The

flooding has greatly complicated our restoration efforts. In most hurricanes, it is not unusual for a central office to lose commercial power and for BellSouth to continue providing service using generators. Those generators require fuel, and we have to be able to get our network technicians to those central offices in order to ensure that the generators are fully fueled and operating correctly. With Katrina, we have 24 central offices that are without commercial power and are operating under generators. However, because of the continued flooding we have not been able to access or support many of these central offices in New Orleans as we would in normal hurricane restorations.

Our experience in the New Orleans Main Central Office at 840 Poydras Street gives a sense of the situation on the ground. BellSouth employees began staffing an Emergency Operations Center (EOC) on the 12th Floor of the building on Sunday, August 28. The office lost power and engaged generators when the storm hit on Monday, but occupants breathed a sigh of relief that there was no flooding. Then, the levy broke and conditions rapidly deteriorated on Tuesday. Technicians and engineers in the office were trying to re-establish service and maintain power by keeping the generators fueled and running. As the situation in New Orleans deteriorated with violence and looting, the New Orleans police and the Louisiana State Police told us to evacuate the building. There was gunfire in the area and it was therefore unsafe for our employees to remain in the area. At 3:00 p.m. CST, the Louisiana State Police arrived and provided us with an armed escort so we could leave the building. We moved to Baton Rouge and, concerned for the security of the building, we arranged for FBI agents to take occupancy of the building at approximately 9:00 that evening. By Friday morning, the Louisiana State Policy and the FBI occupied the building. At that time, we began armed and escorted caravans to the

building to bring fuel for the generator, water for the coolers, and BellSouth personnel to maintain the equipment. We are not yet back to full support but have managed to keep this key switch operations despite the flooding and security concerns.

And another example heroic story rises out of the coastal town of Gulfport, MS. On September 3, a brick wall protecting the main generator keeping the central office alive started to give way. Nine workers from that central office ran from the basement, where they had been working while riding out the storm, to the rooftop room and fortified the walls with whatever they could find – plastic tarps, plywood and even the cardboard from a science project of one worker’s son.

Nevertheless, we have made huge strides towards restoration of communications capabilities. As of the morning of Tuesday, September 6, 506,000, less than one-fourth of the original 2.475 million lines, remained impacted. Only 4,900 of the 440,000 lines remained impacted in the green areas; 23,200 of the 500,000 lines in the yellow zone remained impacted; and 478,500 of the 1.6 million lines in the red zones remained impacted.

As of September 6, we have restored service to all but 20 central offices. This restoration is due to the tireless efforts of our employees on the ground who are working around the clock with a single minded mission of restoring communications to these hard hit areas, and to the efforts of our wireless and wireline industry colleagues who have partnered with us with an unwavering commitment to enable communications.

Of course, other carriers rely upon BellSouth’s network in order to provide service to their customers. We have an Emergency Control Center in Atlanta, which is the control center from which we are coordinating our hurricane response, overseeing

network restoration efforts, and working with other carriers to restore communications. We are coordinating a contingent of impacted carriers with one mission – to make communications work. We collaborated with other carriers, without regard to ownership or jurisdiction, and brokered capacity and worked through technical issues. We conduct two daily calls – one with wireless carriers and one with wireline carriers. Using our network data and resources we assisted in developing a joint wireless restoration plan, now underway, bringing competitive service providers together to serve a single goal of restoring communications. A joint industry team has agreed on a list of prioritized sites and are working together to restore wireless service to these sites in the New Orleans area. This has included traveling by boat to several of the sites in order to survey what equipment is needed to restore service. They traveled by boat to survey sites on Sunday and Monday, and may have already enabled communications from some of these towers while I am speaking with you. This has been a remarkable collaborative effort.

In terms of restoration priority, we have been and continue to focus our support on public safety concerns, including hospitals, E-911 centers and law enforcement. Following the storm, in Florida and Alabama, there were no E-911 centers that incurred outages. For Mississippi, service was impacted to 43 E-911 centers, and service to all 43 centers has been restored on site or by re-routing the calls to other centers. In Louisiana, 35 E-911 centers were impacted, and 28 of these are back in service, either partially on site or through re-routing of calls to other centers. Seven of the centers are out of service. Of the 7 E 911 centers that remain out of service, all are located in the New Orleans area and are served by the Franklin tandem, which is flooded. Four of the centers are located

in Plaquemine and St. Bernard parishes, low lying parishes along the Mississippi River below New Orleans which were in the eye of the storm as it came inland.

We are continuing to work around the clock to restore service. Our restoration efforts involve surveying the damaged area. That activity is approximately 80% complete. Next we concentrate on restoration of highest priority circuits, specifically those which support public safety including hospitals, E911 centers and law enforcement. Then we focus on supporting other carriers, including the wireless industry.

IV. Needs from Government

What can the government do to help? The cooperation and assistance from local, state and federal agencies overall has been good. The FCC, led by Chairman Martin, has been extraordinarily helpful. The FCC has reached out to offer assistance in many areas: waiving rules that will help customers who are without service; taking actions that have and will allow for the quick restoration of network facilities (including the emergency routing of traffic over whatever facilities are available for use); and helping with the publication of “find me” numbers to help locate BellSouth employees. We will continue to need this type of help, particularly related to the efforts to restore communications in Louisiana and the Mississippi Gulf Coast areas. The magnitude of the damage will present unique issues that will need to be resolved quickly and efficiently in order to restore service.

The Louisiana and Mississippi Public Service Commissions have also stepped up to provide assistance to the industry in efforts to assess damage, maintain the operation of the remaining network, and restore service to impacted areas.

BellSouth has been extremely engaged with the Department of Homeland Security's Infrastructure Protection Directorate, headed by Bob Stephan, and most specifically, DHS's National Coordinating Center (NCC). The NCC, which is a division of the National Communications System of DHS, provides a focal point for industry and the Federal government to share operational information and coordinate needs to respond to crises just like this. BellSouth maintains an office at the NCC headquarters, along with many other major wireline, wireless, and satellite providers.

Our representatives there work around the clock to facilitate response efforts for FEMA, DHS, the National Guard, State Emergency Management Agencies and Operations Centers, NORTHCOM, and many other organizations. On industry's behalf, the NCC works through a myriad of concerns, with security and fuel at the top of the list, along with abatement of the flood waters. Industry has also worked together to coordinate fuel convoys, search and rescue, network impacts, and logistics. It's been an outstanding example of the public-private partnership in action.

Through the NCC, and through direct sources, BellSouth has been in communication with the Department of Energy and the Nuclear Energy Regulatory Commission (NERC), which has provided status information on power and electricity. The White House Executive Office of the President has also been strongly supportive in responding to specific issues that required support. We have had good coordination and information from the FAA and DHS on aviation needs. The Department of Defense's Northern Command has also been very helpful, providing information, support, and logistics as well. BellSouth has also had outstanding security support from the Bureau of Alcohol, Tobacco and Firearms, as well as the US Marshal Service, which were

coordinated through FEMA. Keith Hennessey – Deputy Director of national Economic Council at the White House Executive Office of the President, helped BellSouth get the employee hotline number that I described earlier publicized on Fox, CNN, and MSNBC Cable networks, as well as Direct TV satellite network.

Right now, we need several things. First, we need safe access to our network facilities. This will require the abatement of the flooding in New Orleans, which I understand is underway. Once the flood waters have receded, we need adequate security measures to ensure the safety of our technicians trying to assess and conduct repairs.

Second, it will take many months for BellSouth to completely repair the damage caused by Katrina. We will continue to work around the clock to restore service to our customers as they have rebuilt and are ready to be served. BellSouth has engaged and restored 22 hurricanes since 1992, storms such as Andrew, Hugo and now Katrina. Congress and the private sector alike should be cautious about building unrealistic expectations about how long it takes to fully recover from a storm packing the furor of a Katrina.

Third, the government needs to recognize that the cost to BellSouth to restore the communications infrastructure will be significant. BellSouth has estimated that the cost to restore our network as a result of hurricane Katrina will be between \$400 and \$600 million. By comparison, the cost to BellSouth of the damage caused by the four hurricanes that hit Florida last year was approximately \$200 million. And, of course, we're still in the middle of the hurricane season, and the long term impacts of the flooding in New Orleans are hard to estimate.

Restoration of our near ubiquitous infrastructure will demand that we deploy capital, not as a cost plus utility, but as a company in a very competitive industry. We will be expected to rebuild without knowing what our ultimate demand will be. And, we will rebuild this network in an environment where many companies depend on our network for providing service to their customers, but policy doesn't equally distribute the burden of restoration among all players. The FCC has been very helpful in waiving rules that hamper restoration. We will need continued focus from the policy community on rules and regulations that hamper access to capital. Timely restoration requires that we spend this money now, well in advance of knowing what people and businesses will actually return to affected areas, and when.